



Frontier Pumps and Dispensers MPD® Series

Illustrated Spare Parts Manual

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Follow the Regulations

Relevant national regulations related to installation, inspection, maintenance, and service must be observed. Where a regulation may conflict with information in this manual, the regulation must be followed.

MID

The Frontier dispenser conforms to Measuring Instruments Directive 2004/22/EC.
The approval number is UK/0126/0170.

ATEX

The Frontier dispenser is ATEX certified. The approval number is ITS05ATEX53877.

Special Conditions for Safe Use:

If petrol dispensing pumps are supplied without hose, nozzle, breakaway coupling, sight glass, swivel or shear valve, in that case pumps will be suffixed with "X" in the certificate. Correct installation needs to be ensured. The petrol dispensing pumps are installed with certified components only as per European Directives.

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1 – Introduction

This manual contains parts information for Gilbarco® Frontier pumps and dispensers Multi Product Dispenser (MPD®) series. Use this manual to help identify part descriptions, part numbers, and quantities required in a specific assembly.

How to Use This Manual

This manual provides detailed illustrations for Frontier units. Match the callout numbers from an illustration to the corresponding table to find information on a part name, number, and quantity required for that assembly.

Parts Tables

The tables in this manual are set up as follows:

Item #	Description	Part Number	Quantity
1	Spin-Filter 30 Micron for 4/2/4	140806266	2

Definitions for each column are provided below:

Item

The item # column provides digits that match call outs on the related illustrations.

Description

The description column provides a detailed name for each part from the illustration. Where applicable, information such as colors, dimensions, or other details are provided.

Part Number

The part number column provides the current Gilbarco part numbers for each item.

Quantity

Quantity is per assembly shown. Quantity per unit will vary depending on the unit configuration. Use specifications in the parts table to obtain fasteners locally. Most kits contain the hardware required for installation.

Bulleted Items (Located Under Description)

These items are directly related to the part numbers listed. Parts are generally used for mounting or fastening hardware.

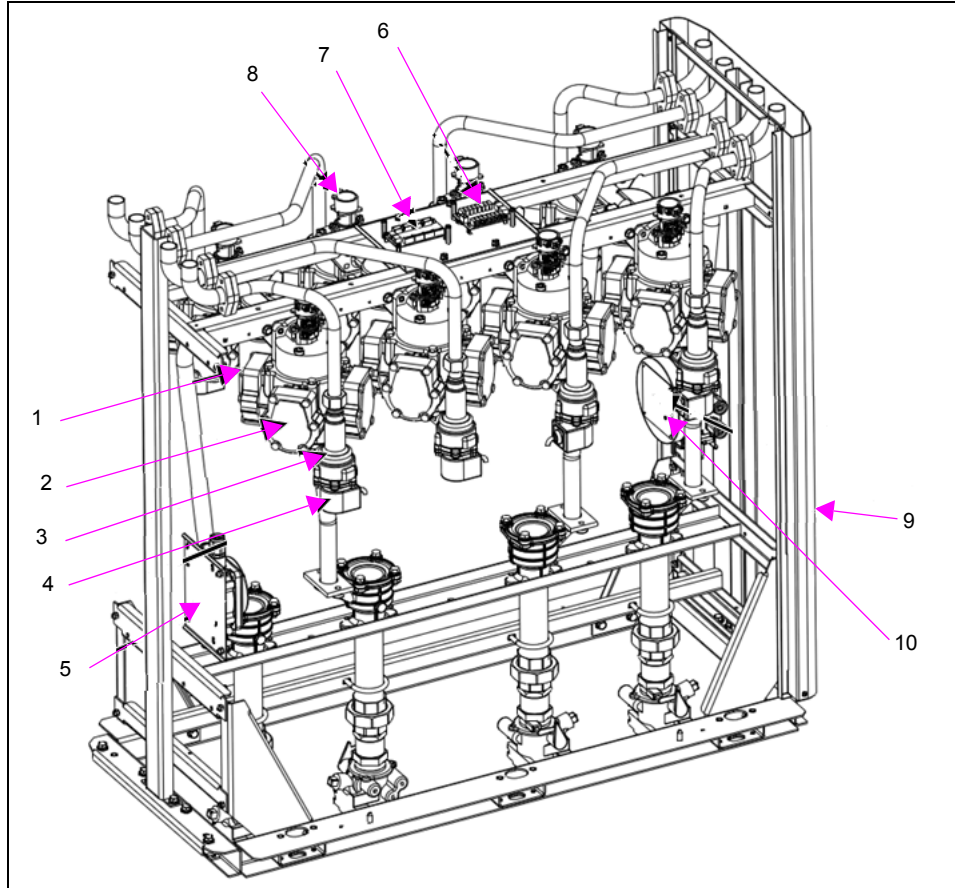
Related Documents

Document Number	Title	GOLDSM Library
MDE-5077	Frontier Owner's Manual	Frontier
MDE-5150	Frontier Installation Manual	Frontier
MDE-5233	Frontier Site Preparation Manual	Frontier

Abbreviations and Acronyms

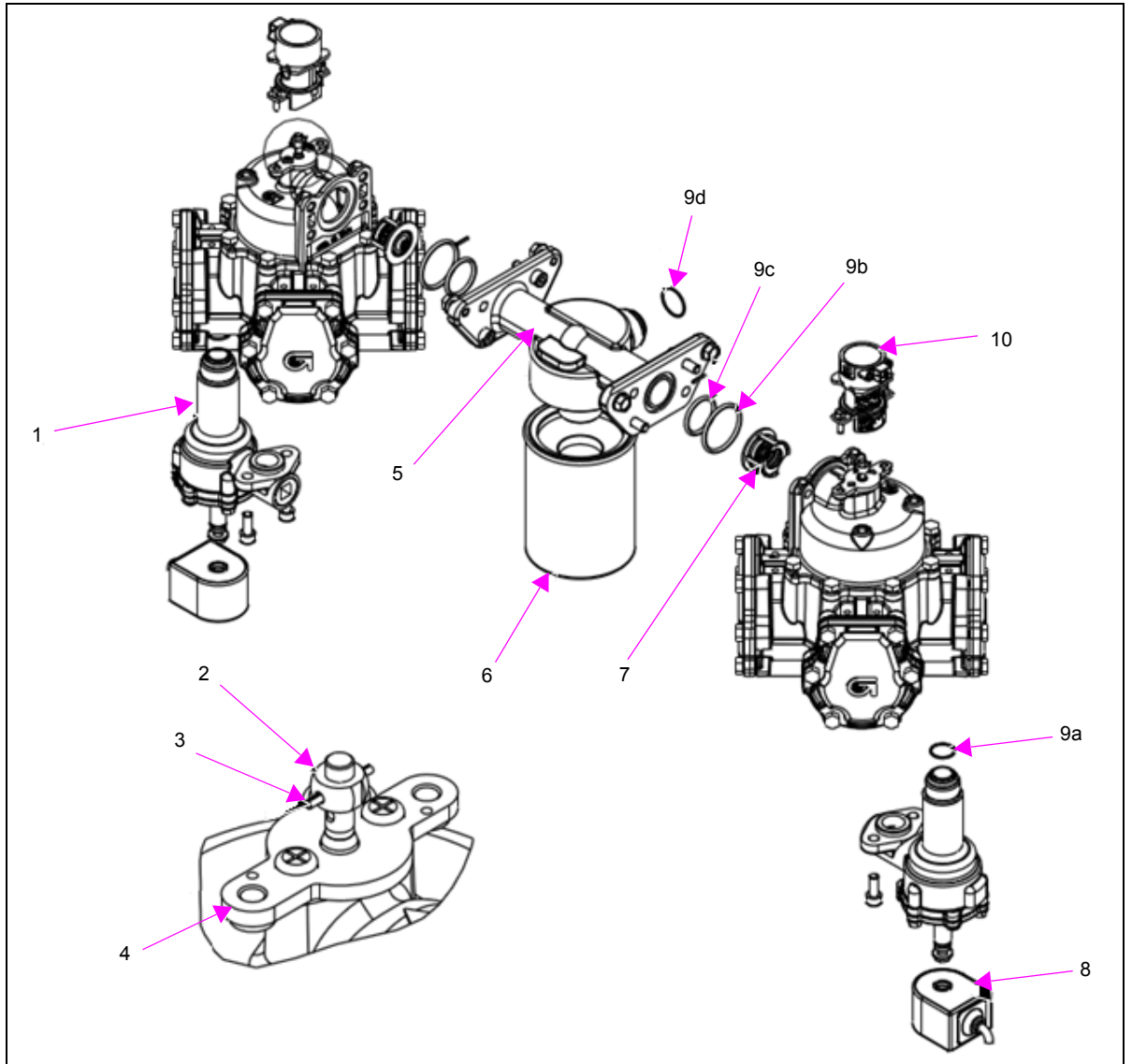
Term	Description
BSPP	British Standard Pipe Parallel
CPU	Central Processing Unit
I.S.	Intrinsic Safety
J-box	Junction Box
MPD	Multi Product Dispenser
NPT	National Pipe Taper National Pipe Thread
PCA	Printed Circuit Assembly
PCB	Printed Circuit Board
PPU	Price per Unit
SIP	Serial Interface PCB
STP	Submerged Turbine Pump

2 – Hydraulics



Item #	Description	Part Number	Quantity
1	Filter Element		
1	Spin-Filter 30 Micron for 2/1/2	140806266	1
2	Spin-Filter 30 Micron for 4/2/4	140806266	2
3	Spin-Filter 30 Micron for 6/3/6	140806266	3
4	Spin-Filter 30 Micron for 8/4/8	140806266	4
2a	Meter Element		
1	C+Meter for 1/2/1	T19976-G3	2
2	C+Meter for 4/2/4	T19976-G3	4
3	C+Meter for 6/3/6	T19976-G3	6
4	C+Meter for 8/4/8	T19976-G3	8
2b	Meter Element		
1	HD Meter for 1/2/1	T19976-V10	2
2	HD Meter for 4/2/4	T19976-V10	4
3	HD Meter for 6/3/6	T19976-V10	6
4	HD Meter for 8/4/8	T19976-V10	8
3	Proportional Valve without Coil		
1	For 2/1/2	140863832	2
2	For 4/2/4	140863832	4
3	For 6/3/6	140863832	6
4	For 8/4/8	140863832	8
4	Coil 24 V for Proportional Valve		
1	For 2/1/2	LF909690005	2
2	For 4/2/4	LF909690005	4
3	For 6/3/6	LF909690005	6
4	For 8/4/8	LF909690005	8
5	Communication Box	PE90007	1
-	Communication Box Bracket	PB91743	1
6	Intrinsic Safety (I.S.) Switch Hub	140998913	1
7	I.S. Bus Connector Board E101	140998636	1
8	Serial Interface PCB (SIP) Pulser		
1	For 2/1/2	141004586	2
2	For 4/2/4	141004586	4
3	For 6/3/6	141004586	6
4	For 8/4/8	141004586	8
9	Side Frame		
1	For 2/1/2	PB913840005F	2
2	For 4/2/4	PB913840005F	2
3	For 6/3/6	PB913840005F	2
4	For 8/4/8	PB913840005F	2
10	Junction Box (J-box)	GE90274	1
-	J-box Bracket	PB91743	1

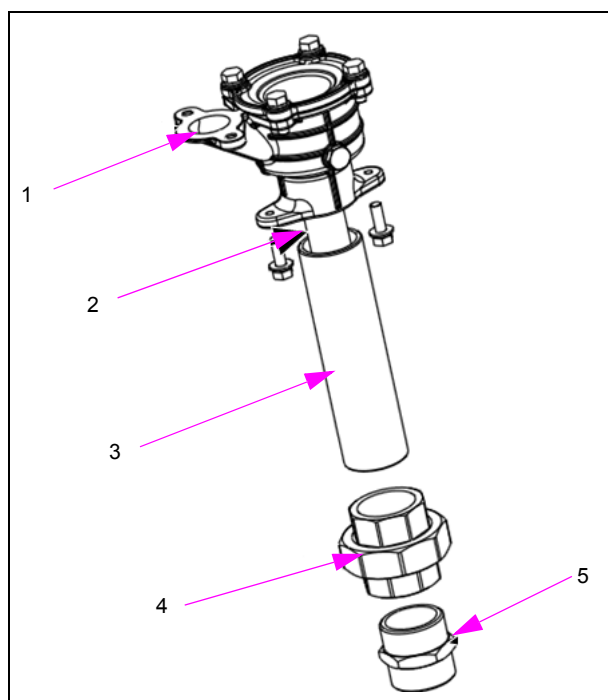
3 – Metering Units and Valves



Metering Units and Valves

Item #	Description	Part Number	Quantity
1	Proportional Valve without Coil	140863832	1
2	Swivel boll	K93546	1
3	Roll Pin	K78378-47	1
4	Retainer, Meter Seal	M10359B001	1
5	Housing Manifold	140863781	1
6	Filter Element	140806266	
7	Meter Check Valve		
1	For 2/1/2	M13257A001	2
2	For 4/2/4	M13257A001	4
3	For 6/3/6	M13257A001	6
4	For 8/4/8	M13257A001	8
8	Coil 24 V for Proportional Valve	LF909690005	
9a	O-ring 19 x 1		
1	For 2/1/2	140483826	2
2	For 4/2/4	140483826	4
3	For 6/3/6	140483826	6
4	For 8/4/8	140483826	8
b	O-ring 40 x 3.5		
1	For 2/1/2	140687086	2
2	For 4/2/4	140687086	4
3	For 6/3/6	140687086	6
4	For 8/4/8	140687086	8
c	O-ring 30 x 3.5		
1	For 2/1/2	PL90306	2
2	For 4/2/4	PL90306	4
3	For 6/3/6	PL90306	6
4	For 8/4/8	PL90306	8
d	O-ring 25 x 1.5		
1	For 2/1/2	PL90305	2
2	For 4/2/4	PL90305	4
3	For 6/3/6	PL90305	6
4	For 8/4/8	PL90305	8
10	SIP Pulser	141004586	

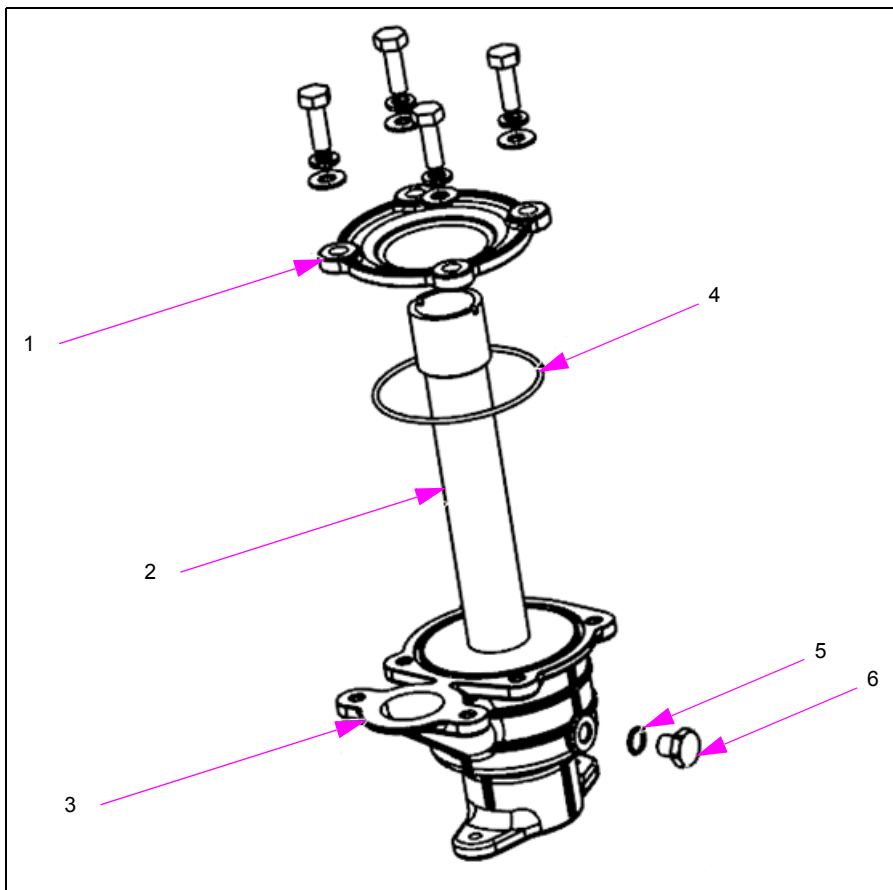
4 – Inlet Connection



Item #	Description	Part Number	Quantity
1	Inlet Filter Box		
1	For 2/1/2	PP90006	1
2	For 4/2/4	PP90006	2
3	For 6/3/6	PP90006	3
4	For 8/4/8	PP90006	4
2	Inlet Filter-Mesh		
1	Cover for 2/1/2	PP90006	1
2	Cover for 4/2/4	PP90006	2
3	Cover for 6/3/6	PP90006	3
4	Cover for 8/4/8	PP90006	4
3	Feed line		
1	For 2/1/2	PL30332	1
2	For 4/2/4	PL30332	2
3	For 6/3/6	PL30332	3
4	For 8/4/8	PL30332	4
4	Suction Union Assembly		
1	For 2/1/2	GP90025	1
2	For 4/2/4	GP90025	2
3	For 6/3/6	GP90025	3
4	For 8/4/8	GP90025	4
5	Shear Valve Adaptor		
1	For 2/1/2	PL60132	1
2	For 4/2/4	PL60132	2
3	For 6/3/6	PL60132	3
4	For 8/4/8	PL60132	4

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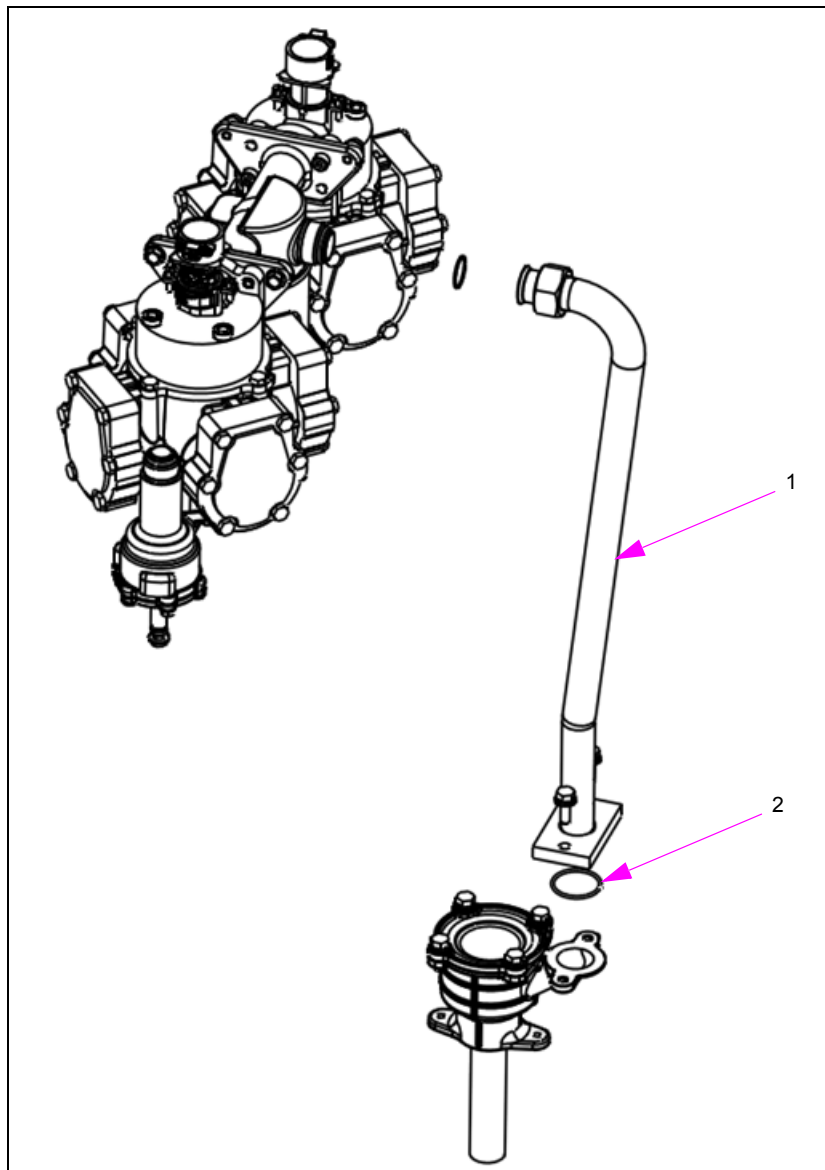
5 – Inlet Filter Assembly



Item #	Description	Part Number	Quantity
1	Inlet Filter Cover	PP80009	1
2	Inlet Filter Mesh	PP90007	1
3	Inlet Filter Housing	PP80007	1
4	Inlet Filter Cover O-ring	PL50156	1
5	Plug, O-ring	GP50035	1
6	Plug, M10	GP60068	1

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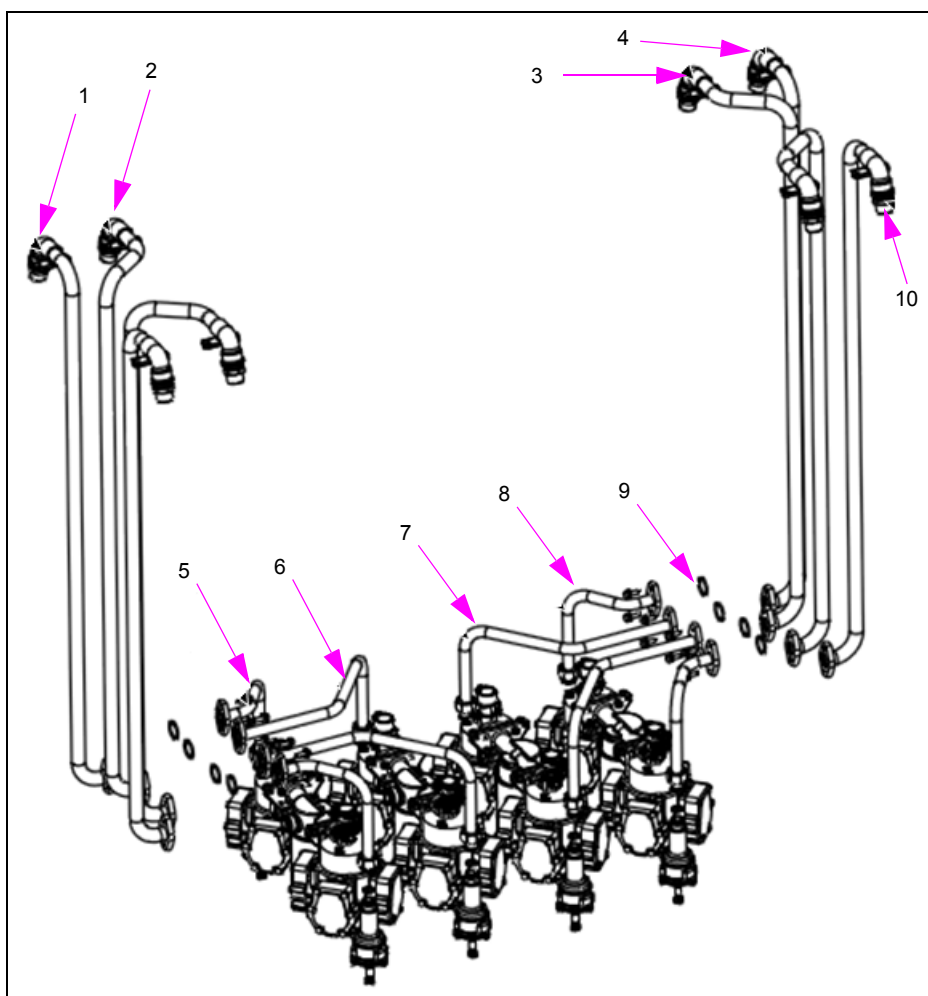
6 – Meter Inlet Assembly



Item #	Description	Part Number	Quantity
1	Meter Inlet Assembly		
1	For 2/1/2	PL90512	1
2	For 4/2/4	PL90512	2
3	For 6/3/6	PL90512	3
4	For 8/4/8	PL90512	4
2	Filter Outlet O-ring		
1	For 2/1/2	PL50157	1
2	For 4/2/4	PL50157	2
3	For 6/3/6	PL50157	3
4	For 8/4/8	PL50157	4

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7 – Meter Outlet Assembly

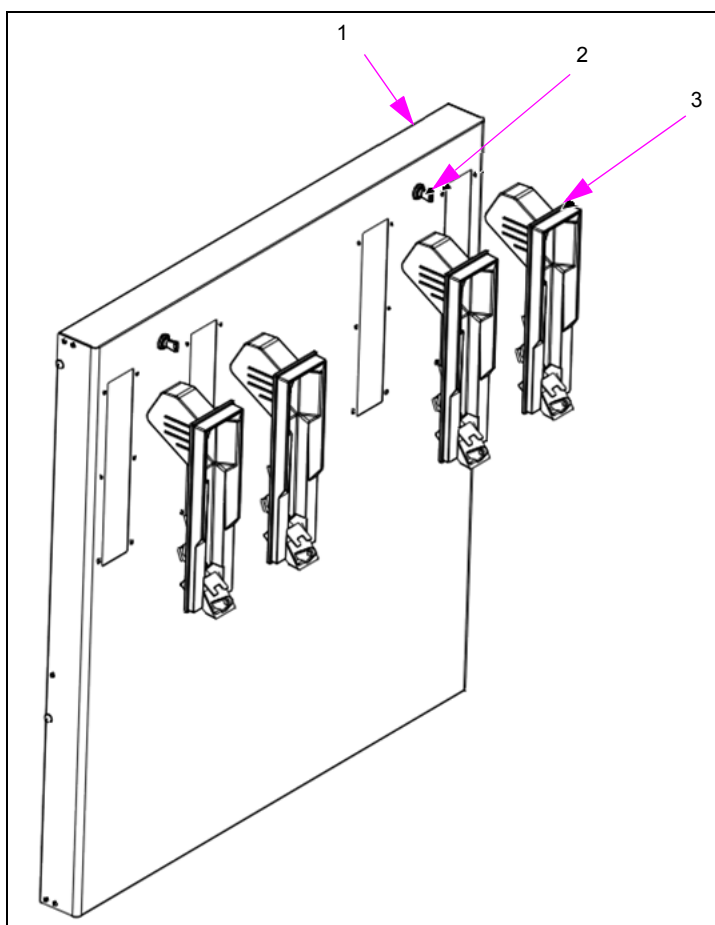


Item #	Description	Part Number	Quantity
1	Right Outlet Assembly (HD)		
1	For 2/1/2	PL90560	2
2	For 4/2/4	PL90560	2
3	For 6/3/6	PL90560	2
4	For 8/4/8	PL90560	2
2	Central Right Outlet Assembly (HD)		
1	For 2/1/2	NA	-
2	For 4/2/4	NA	-
3	For 6/3/6	PL90545	1
4	For 8/4/8	PL90545	2
3	Central Right Outlet Assembly (HD)		
1	For 2/1/2	NA	-
2	For 4/2/4	NA	-
3	For 6/3/6	PL90546	1
4	For 8/4/8	PL90545	2

Meter Outlet Assembly

Item #	Description	Part Number	Quantity
4	Left Outlet Assembly (HD)		
1	For 2/1/2	NA	-
2	For 4/2/4	PL90553	2
3	For 6/3/6	PL90553	2
4	For 8/4/8	PL90553	2
5	Right Outlet Connector		
1	For 2/1/2	PL90562	1
2	For 4/2/4	PL90562	2
3	For 6/3/6	PL90557	2
4	For 8/4/8	PL90557	2
6	Central Right Outlet Connector		
1	For 2/1/2	NA	-
2	For 4/2/4	NA	-
3	For 6/3/6	PL90559	1
4	For 8/4/8	PL90559	2
7	Central Left Outlet Connector		
1	For 2/1/2	NA	-
2	For 4/2/4	NA	-
3	For 6/3/6	PL90550	1
4	For 8/4/8	PL90550	2
8	Left Outlet Connector		
1	For 2/1/2	PL90867	1
2	For 4/2/4	PL90564	2
3	For 6/3/6	PL90555	2
4	For 8/4/8	PL90555	2
9	O-ring 29 x 3.5		
1	For 2/1/2	GL50210	2
2	For 4/2/4	GL50210	4
3	For 6/3/6	GL50210	6
4	For 8/4/8	GL50210	8
10	Adapter 1" NPT X 1" British Standard Pipe Parallel (BSPP)		
1	For 2/1/2	PL60133	2
2	For 4/2/4	PL60133	4
3	For 6/3/6	PL60133	6
4	For 8/4/8	PL60133	8

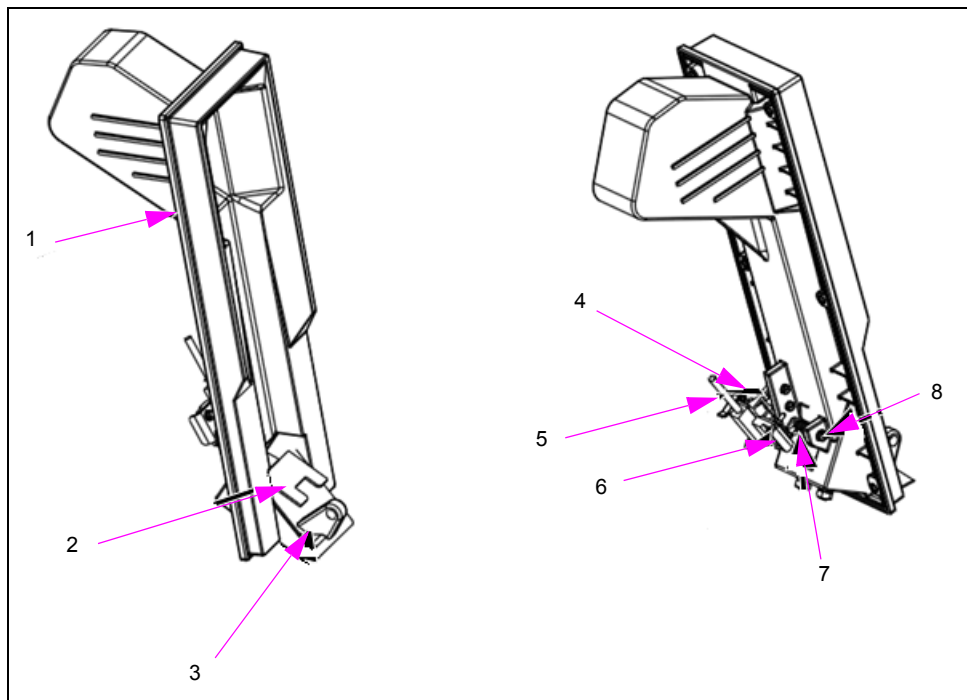
8 – Lower Panel Assembly



Item #	Description	Part Number	Quantity
1	Lower Panel Assembly		
1	For 2/1/2	PB917160002	2
2	For 4/2/4	PB917160001	2
3	Front side for 6/3/6	PB916920001	1
4	Rear side for 6/3/6	PB916920003	1
5	For 8/4/8	PB916920002	2
2	Lock Assembly-Metal		
1	For 2/1/2	PL001280001	2
2	For 4/2/4	PL001280001	2
3	For 6/3/6	PL001280001	4
4	For 8/4/8	PL001280001	4
3	Nozzle Boot Assembly		
1	For 2/1/2	GL90632	2
2	For 4/2/4	GL90632	4
3	For 6/3/6	GL90632	6
4	For 8/4/8	GL90632	8

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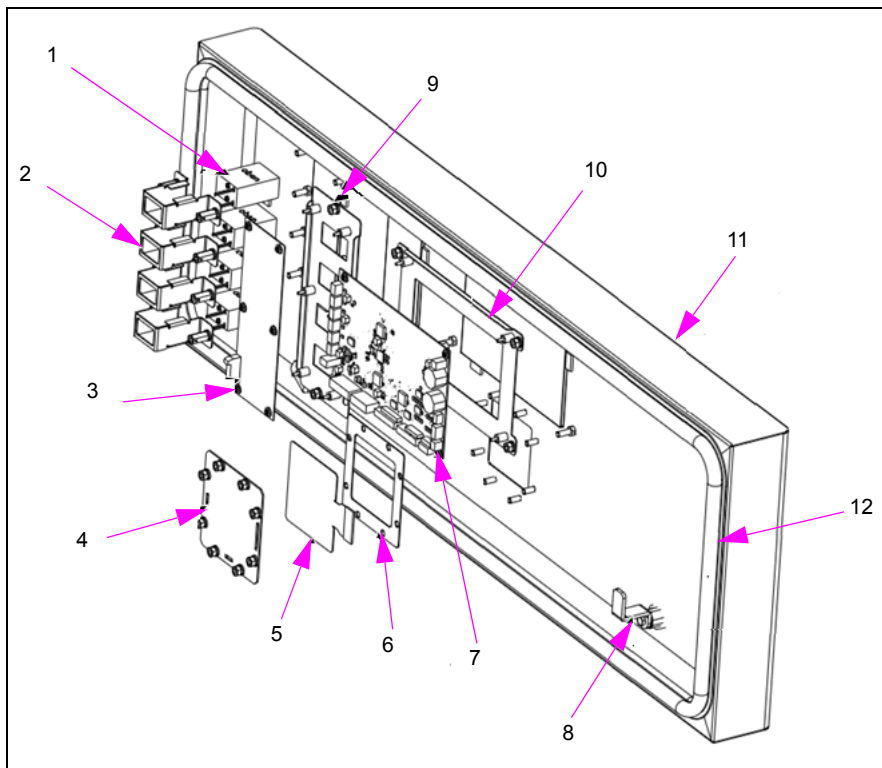
9 – Nozzle Boot Assembly



Item #	Description	Part Number	Quantity
1	Nozzle Boot	PL50056	1
2	Operating Lever	GL70801	1
3	Nozzle Rest	PL50054	1
4	Boot Switch Holder	GL50390	1
5	Boot Switch Cable	GE00143	1
6	Magnet	GE00093	1
7	Torsional Spring	PL00058	1
8	Torsional Spring Pivot Shaft	PL60094	1

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10 – Display Door Assembly

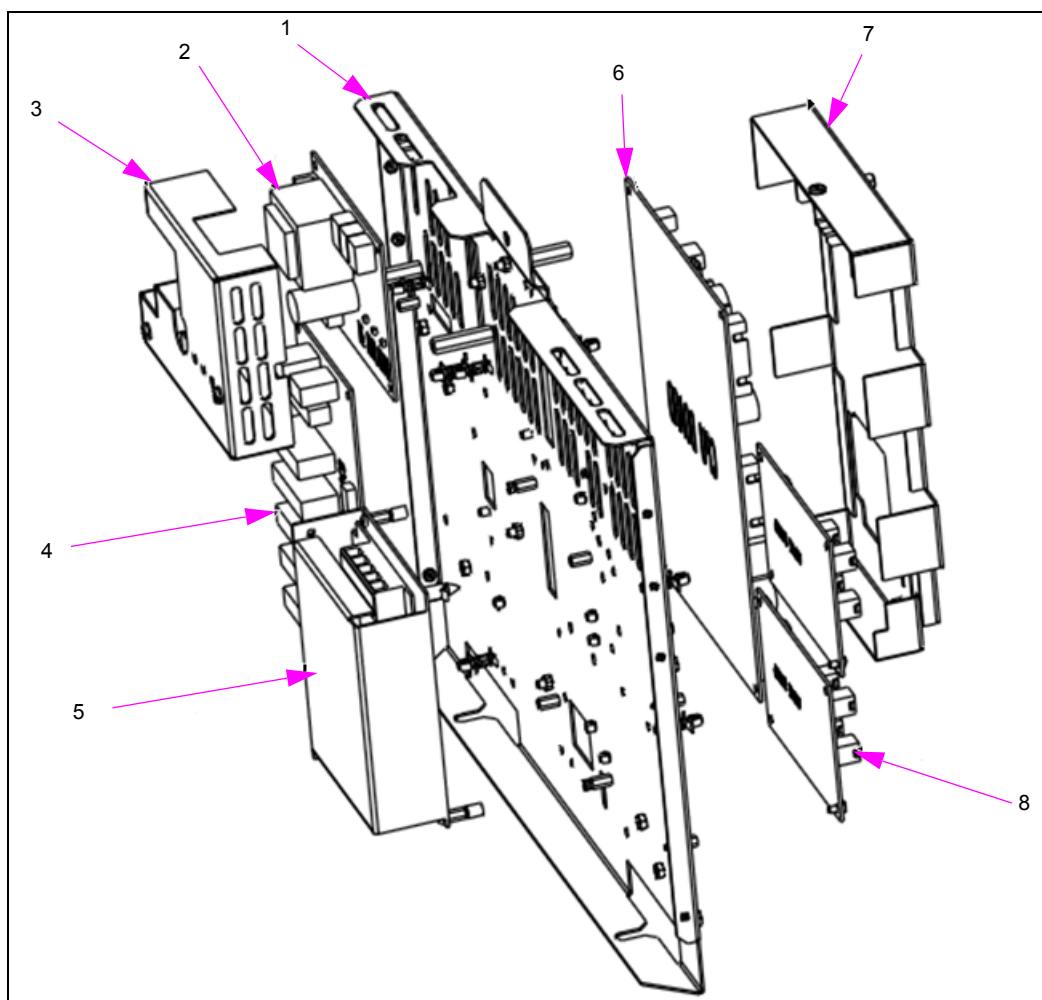


Item #	Description	Part Number	Quantity
1	Totaliser		
1	For 2/1/2	140910806	2
2	For 4/2/4	140910806	4
3	For 6/3/6	140910806	6
4	For 8/4/8	140910806	8
2	Totaliser Holder		
1	For 2/1/2	PB70826	2
2	For 4/2/4	PB70826	4
3	For 6/3/6	PB70826	6
4	For 8/4/8	PB70826	8
3	Multi Price per Unit (PPU) Display		
1	For 2/1/2	140950006	2
2	For 4/2/4	140950006	2
3	For 6/3/6	140950006	2
4	For 8/4/8	140950006	2
4	Keypad Holder		
1	For 2/1/2	PL70960	2
2	For 4/2/4	PL70960	2
3	For 6/3/6	PL70960	2
4	For 8/4/8	PL70960	2

Display Door Assembly

Item #	Description	Part Number	Quantity
5	Preset Keypad		
1	For 2/1/2	140947996	2
2	For 4/2/4	140947996	2
3	For 6/3/6	140947996	2
4	For 8/4/8	140947996	2
6	Preset Keypad Gasket		
1	For 2/1/2	140943273	2
2	For 4/2/4	140943273	2
3	For 6/3/6	140943273	2
4	For 8/4/8	140943273	2
7	Main Display		
1	For 2/1/2	140968706	2
2	For 4/2/4	140968706	2
3	For 6/3/6	140968706	2
4	For 8/4/8	140968706	2
8	Door Lock		
1	For 2/1/2	NA	-
2	For 4/2/4	NA	-
3	For 6/3/6	PL001280001	4
4	For 8/4/8	PL001280001	4
9	Multi PPU Holder		
1	For 2/1/2	PB91718	2
2	For 4/2/4	PB91718	2
3	For 6/3/6	PB91718	2
4	For 8/4/8	PB91718	2
10	Main Display Holder		
1	For 2/1/2	PB91717	2
2	For 4/2/4	PB91717	2
3	For 6/3/6	PB91717	2
4	For 8/4/8	PB91717	2
11	Display Door		
1	For 2/1/2	PB917500002E	2
2	For 4/2/4	PB917500001E	2
3	For 6/3/6	PB917410001E	2
4	For 8/4/8	PB917410002E	2
12	Display Door Gasket		
1	For 2/1/2	PL50160	2
2	For 4/2/4	PL50160	2
3	For 6/3/6	PL501600001	2
4	For 8/4/8	PL501600001	2

11 – Electronics Cards Assembly



Item #	Description	Part Number	Quantity
1	Card Mounting Bracket	PL90565	1
2	IS Interface E101	140836116	1
3	IS Interface Sealing Cover	PL70961	1
4	Submerged Turbine Pump (STP) Connector Printed Circuit Assembly (PCA)	140948106	1
5	Power Supply 230 V/24 V	141001976	1
6	Central Processing Unit (CPU) Board E101	140836066	1
7	Controller Card Bracket	PL90568	1
-	Cover Sheet for CPU Calibration Switch	PL70955	1
8	Proportional Valve Drive Board		
1	For 6/3/6	140836076	1
2	For 8/4/8	140836076	2
3	For 10/5/10	140836076	2

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